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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,687	08/11/2005	Alan Jack Pendleton	263347US6PCT	9917
22850 7590 01/05/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER KEEFE, STEPHEN L	
			ART UNIT 3671	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/05/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/519,687	<b>Applicant(s)</b> PENDLETON ET AL.	
	<b>Examiner</b> Stephen L. Keefe	<b>Art Unit</b> 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2005 and 11 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 33-76 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33-76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. The incorporation of essential material in the specification by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).
2. The use of the trademark "Railpad" (page 14, line 25) has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

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***Claim Objections***

3. Claim 47 is objected to because of the following informalities: The phrase "edges of adjacent of the covers" on page 7, line 4 should be --edges adjacent of the covers--. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 33, 35, 37-40, 42, 43, 49-55, 57, 59-62, 64, 65, and 71-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raquet (US 3,218,942) in view of DeFrance et al. (US 4,840,514).

Regarding claims 33 and 55, Raquet discloses a frame for bounding an open, upper end of a downwardly extending recess formed in the ground comprising:

An upstanding, peripheral wall (10) having protruding outwardly therefrom a flange (R) that is embeddable in a medium (12) so as to retain the frame relative to the recess (column 4, lines 12-16 and Figure 1).

The frame including secured thereto within the peripheral wall at least two seatings (22) for at least one cover (D) that is insertable into the frame with the peripheral wall surrounding at least part of the cover (D), the at least two seatings (22) each including a seating member (D) (column 4,

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lines 20-24 and Figure 1).

Each seating also including a cuboidal block of material (C) defining an in-use upwardly facing shoulder that is in use of the frame inclined to define respective upper and lower shoulder edges, directions of inclination of the shoulders being such as to promote self-centering of a cover (D) supported thereby (column 4, lines 52-56 and column 5, lines 48-52 and Figures 1 and 21).

Four corners of a quadrilateral thereby defined on an in-use underside of the one or more covers (D) (column 6, lines 14-17).

What Raquet does not disclose is that the seating member has secured thereto a resiliently deformable pad protruding from the seating member and is engageable by a part of the cover (D), and that there can be at least four resiliently deformable pads each interconnecting the cover and seating.

However, DeFrance et al. teaches that, for a manhole assembly, the seating member has secured thereto a resiliently deformable pad (3) at least a part of which protrudes from the seating member to provide a resiliently deformable seating surface that is engageable by a part of the cover, and that there can be at least four resiliently deformable pads (3) (it is obvious that the pad principle taught by DeFrance et al. can be arrayed as a quadrilateral) each interconnecting the cover and seating when the cover (2) is inserted in the frame (1), the resiliently deformable pads lying at corners of a quadrilateral thereby defined on an in-use underside of the one or more covers (2) (column 2, lines 31-33 and 53-58 and Figures 1 and 2). Therefore, it would have been obvious to

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one of ordinary skill in the art at the time the invention was made to modify the manhole frame disclosed by Raquet to have deformable pads, as taught by Defrance et al., to provide a hinged manhole assembly construction where "the cover will correctly reseal itself under its own weight" and where the hinge cannot be jammed or wedged (column 1, lines 43-47).

Regarding claims 35, 37, 57, and 59, Raquet discloses a frame for a ground recess wherein the upstanding wall (10) is rectangular when viewed in plan, the frame including both the seating in at least two corners of the thus-defined rectangle, and including at least one of the seatings part-way along at least one side of the thus-defined rectangle (column 6, lines 14-17 and Figures 1-3).

Regarding claims 38 and 60, Raquet discloses essentially all that is claimed, but does not disclose that each upwardly facing shoulder has formed therein a mortise that defines a slot that is open on the upwardly facing shoulder and on a further face of the cuboidal block.

However, Defrance et al. teaches that, for a manhole assembly, each upwardly facing shoulder has formed therein a mortise (5) that defines a slot that is open on the upwardly facing shoulder and on a further face of the cuboidal block (13) (column 2, lines 59-62 and Figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the manhole frame disclosed by Raquet to have mortise connections, as taught by Defrance et al., to provide a hinged manhole assembly construction

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where "the cover will correctly reseal itself under its own weight" and where the hinge cannot be jammed or wedged (column 1, lines 43-47).

Regarding claims 39 and 61, Raquet discloses a frame for a ground recess with shoulders tapering in width between the base and its opening on the shoulder with a connecting member of generally complementary cross section (obviously this could be a mortise), similarly tapered (column 4, lines 52-56, column 5, lines 48-52 and Figures 1 and 21).

What Raquet does not disclose is a mortise and resiliently deformable pad including an engaging portion and restrained against movement relative to the mortise in the in-use vertical direction by engagement of the engaging portion in the mortise.

However, Defrance et al. teaches, for a manhole assembly, a mortise (5) and resiliently deformable pad (3) including an engaging portion and restrained against movement relative to the mortise (5) in the in-use vertical direction by engagement of the engaging portion in the mortise (5) (column 2, lines 59-62 and Figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the manhole frame disclosed by Raquet to have pads restrained against movement, as taught by Defrance et al., to provide a hinged manhole assembly construction where "the cover will correctly reseal itself under its own weight" and where the hinge cannot be jammed or wedged (column 1, lines 43-47).

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Regarding claims 40 and 62, Raquet discloses essentially all that is claimed, but does not disclose a region of material that is secured to the engaging portion and protrudes from the seating member via the opening in the shoulder.

However, Defrance et al. teaches a region of material (3) that is secured to the engaging portion and protrudes from the seating member (2) via the opening in the shoulder (5) (column 2, lines 56-60 and Figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the manhole frame disclosed by Raquet to have pads engaging the seating member, as taught by Defrance et al., to provide a hinged manhole assembly construction where "the cover will correctly reseal itself under its own weight" and where the hinge cannot be jammed or wedged (column 1, lines 43-47).

Regarding claims 42, 43, 64, and 65, Raquet discloses:

A pair of seating members (22) that are spaced from one another in the in-use horizontal direction and the upwardly facing shoulders of which are mirror images of one another whereby the upper shoulder edges define the furthest spaced apart regions of the pair of seating members (column 4, lines 52-56 and column 5, lines 48-52 and Figures 1 and 21).

A frame including one or more covers (D) resting thereon (column 4, lines 20-24, column 6, lines 14-17 and Figure 1).



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Regarding claims 49-54 and 71-76, Raquet discloses a frame for a ground recess comprising:

One or more of the covers (D) perforated (18) to define a grating (column 4, lines 18-19 and Figures 1 and 2).

The width of the flange (R) varying (obvious in "usual practice") from place to place about the periphery of the frame (column 4, lines 14-15).

Protrusions or recesses formed on one of more surfaces thereof that are embeddable in a bonding medium at the open, upper end of the recess, the protrusions or recesses enhancing bonding of the frame (R) in the medium and stiffening the frame in the "usual manner" (column 4, lines 14-15 and Figure 1).

Protrusions or recesses including an array of ribs formed on an upwardly and/or downwardly facing surface of the flange (column 4, lines 14-15 and Figure 1).

Ribs of the array that are elongate and are mutually parallel, and all protrude by generally a same amount from the flange (column 4, lines 14-15 and Figure 1).

The frame being generally polygonal when viewed in plan, wherein the elongate axis of each rib is generally parallel with a diagonal of the thus-defined polygon (column 6, lines 14-17 and Figure 1).

5. Claims 34, 36, 41, 44-48, 56, 58, 63, and 66-70 are rejected under 35

U.S.C. 103(a) as being unpatentable over Raquet ('942) in view of Defrance et

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al. ('514) as applied to claim 33 above, and further in view of Devlin (US 5,404,676).

Regarding claims 34 and 56, the above combination discloses essentially all that is claimed, but does not disclose that the resiliently deformable pad is releasably securable.

However, Devlin teaches, for a frame for a ground recess, that the resiliently deformable pad "can be replaced very easily" and the water-tight seal can be "performed in only a matter of seconds" (column 6, lines 9-22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the manhole frame disclosed by the above combination to have releasably securable pads to ensure a tight seal, as taught by Devlin, to provide pads to make contact with the mounting wall frame only when the lid comes to within one quarter of an inch of being seated on the mounting frame shoulder (column 2, lines 38-41).

Regarding claims 36 and 58, Raquet discloses a seating in all four corners of the rectangle (column 6, lines 14-17 and Figures 1-3).

Regarding claims 41 and 63, the above combination discloses essentially all that is claimed, but does not disclose that the pad may be removably inserted into a slot.

However, Devlin teaches, for a frame for a ground recess, that a deformable pad may be removably inserted and it is obvious that the above

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combination could contain such a slot (column 6, lines 16-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the manhole frame disclosed by the above combination to have releasably securable pads, as taught by Devlin, to provide pads to make contact with the mounting wall frame only when the lid comes to within one quarter of an inch of being seated on the mounting frame shoulder (column 2, lines 38-41).

Regarding claims 44 and 66, Raquet discloses that there may be multiple seatings, and it is obvious that these seatings could be used to seat hinges (column 4, lines 52-57 and column 6, lines 14-17).

What Raquet does not disclose is that the frame and cover include cooperating hinge parts, whereby the cover is hingedly secured to the frame.

However, Defrance et al. teaches that the frame (1) and cover (2) include cooperating hinge parts, whereby the cover (2) is hingedly secured to the frame (1) (column 2, lines 31-34 and Figures 6-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the manhole frame disclosed by the above combination to hinges connecting the frame and cover, as taught by Defrance et al., to provide a hinged manhole assembly construction where "the cover will correctly reseal itself under its own weight" and where the hinge cannot be jammed or wedged (column 1, lines 43-47).

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Regarding claims 45-47 and 67-69, Raquet discloses a frame for a ground recess comprising:

A second side having secured thereat a respective pair of the seatings (22) that are engageable by the underside of each of the covers (D) (column 4, lines 20-24 and column 6 lines 14-17 and Figure 1).

A frame that is essentially rectangular and includes a plurality of the covers (D) arranged side by side, where it is obvious that all of the covers (D) could be hinged on the same side of the frame whereby the covers are openable to leave free access to the recess on all remaining sides of the frame (column 6, lines 14-17 and Figure 1).

A frame wherein the upstanding wall is rectangular when viewed in plan, and wherein each cover (D) is rectangular, a major axis of each cover lying perpendicular to a major axis of the rectangle defined by the upstanding wall (10), and edges adjacent of the covers lying spaced from one another such that the covers are configured to overlies substantially an entire aperture defined by the recess (column 6, lines 14-17 and Figure 1).

Regarding claims 48 and 70, the above combination discloses essentially all that is claimed, but does not disclose that one or more of the covers is substantially imperforate.

However, Devlin teaches that one or more of the covers (16) is substantially imperforate (Figure 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the

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manhole frame disclosed by the above combination to have an imperforate cover, as taught by Devlin, to provide pads to make contact with the mounting wall frame only when the lid comes to within one quarter of an inch of being seated on the mounting frame shoulder (column 2, lines 38-41).

### ***Conclusion***

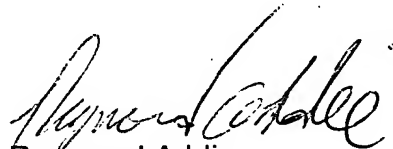
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Weiler (DE 3637493 A1), Spiess et al. (US 5,160,213), Vigneron et al. (US 4,763,449), Hauer et al. (US 2002/0141820 A1), Tompkins et al. (5,536,110), Bowman (US 4,867,600), Davis (2,137,751), and Bradford (US 5,950,368) provide additional concepts for frames for a recess in the ground.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen L. Keefe whose telephone number is 571-272-5652. The examiner can normally be reached on 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571-272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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12/15/06